

Red Line/Blue Line Connector Project

Boston,
Massachusetts

Massachusetts Department of Transportation
Boston, Massachusetts



March 2010



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Soil and Groundwater Management Plan

1.1 Introduction

TRC Environmental Corporation (TRC) prepared this Soil and Groundwater Management Plan for the Red Line/Blue Line Connector Project (the “Project”), for the Massachusetts Department of Transportation (MassDOT) and STV Incorporated (STV) in accordance with the TRC signed contract, dated June 15, 2009. This Soil and Groundwater Management Plan has been prepared as part of the 10 percent design phase of work and prior to the collection of soil and groundwater quality data. When site specific data has been collected during a subsequent design phase; this Soil and Groundwater Management Plan will likely need to be revised taking into account this new information.

1.1.1 Background

The Red Line-Blue Line Project Corridor is an MBTA Right-of-Way located along Cambridge Street in downtown Boston, Massachusetts, and is situated between Charles/MGH Station and Bowdoin Station and between Bowdoin Station and Government Center Station.

The Project Corridor is approximately 0.6 miles in length and consists of various areas including railway stations, tunnels, mechanical rooms, and electrical closets totaling approximately 383,000 square feet of space. A *Site Location Map*, identifying the general vicinity of the Project Corridor, is provided in Figure 1. Figures 2 and 3 provide a *Site Plan* depicting known Massachusetts Contingency Plan (MCP) sites with soil and groundwater contamination along the Project Corridor.

The construction project will generate excess soil and groundwater during the installation of subsurface transportation facilities. It is assumed that due to the urban nature of the construction site, on-site stockpiling of soil, rubble, and rock will *not* be permitted. Therefore, this plan assumes pre-characterization of soil and

groundwater will be completed before contract preparation, to allow direct loading of trucks for off-site disposal.

There are several known MCP hazardous waste disposal (spill) sites within the work area (see Figures 2 and 3). Pre-characterization of soil and groundwater will identify areas of Oil and Hazardous Materials (OHM) and allow MassDOT to select appropriate disposal options. Data generated by the pre-characterization program may also support other MCP documents as required by the MCP (310 CMR 40.0000).

Wherever excavation is anticipated within an applicable MCP site; a Project Release Abatement Measure (RAM) Plan will be prepared by a Massachusetts Licensed Site Professional (LSP) and submitted to the Massachusetts Department of Environmental Protection (MassDEP) prior to the commencement of construction activities, in accordance with 310 CMR 40.1067.

It is assumed that most of the excavated subsurface materials that will consist mostly of soil but also include urban fill, rock, and construction debris with low levels of OHM. It is also assumed that a small portion of the excavated materials will contain high concentrations of OHM.

All Contractors coming in contact with contaminated materials must be 40-hour OSHA HAZWOPER trained, and must use a Contractor-prepared Health and Safety Plan.

All excess soil will be transported under a Bill Of Lading (BOL) prepared by a Licensed Site Professional (LSP) to ensure disposal or recycling at appropriate facilities.

1.1.2 Limitations

The procedures presented within this document are based only on documented existing conditions along the Project Corridor. No site specific soil and groundwater data was gathered for the generation of this soil and groundwater Management Plan. This project did not include the installation of environmental test borings/monitoring wells or collection of analytical samples to confirm the presence or absence of soil and groundwater contamination along the Project Corridor.

1.1.3 References

State and federal regulations and guidelines applicable to management of soil and groundwater during construction include the following:

- 310 CMR 30.000, Massachusetts Hazardous Waste Management Rules
- 310 CMR 40.0000, Massachusetts Contingency Plan (MCP)

- MassDEP Policy # Comm-97-001: Massachusetts Landfill Soil Cover Policy
- MassDEP Guidance: Construction Activities In Contaminated Areas, 1994
- MassDEP Guidance: Construction of Buildings in Contaminated Areas, January 2000, Policy #WSC-00-425
- USEPA NPDES Remediation General Permit Regulations,
<http://www.epa.gov/region1/npdes/rgp.html>
- USEPA RCRA Regulations, 40 CFR Part 261.

1.2 Soil Management

It is anticipated that approximately 176,000 cubic yards of soil and/or subsurface material will be excavated or otherwise displaced during the project. Excavation activity will occur along the length of the Project area. At the 10% design stage, there is limited information on the quality of soil and subsurface materials that will be excavated for this project. Concentrations of OHM are expected to be present at various locations along the Project Corridor. Any plans for disposal of excess soil and subsurface materials shall be subject to review and approval by the MassDOT.

1.2.1 Temporary Stockpiles

Temporary stockpiles will only be permitted during the work day, and must not remain along the corridor over night. Soils will be shipped from the project site on a daily basis to either a temporary storage location or to the final disposal location.

All shipments of excess material from the project corridor must be accompanied by an MCP Bill of Lading (signed by an LSP) or by a hazardous waste manifest.

1.2.2 Transportation of Contaminated Materials

All excess materials contaminated with OHM will be placed in poly-lined trucks or roll offs, based on the level of contamination present at the construction location.

The trucks and/or roll offs will be completely covered with poly sheeting when not in use and during transportation. All shipments of excess material from the project corridor must be accompanied by an MCP Bill of Lading (signed by an LSP) or by a hazardous waste manifest.

1.2.3 Disposal Characterization

For materials where additional sampling is required to determine the appropriate method of disposal or recycling, one composite soil sample should be collected for every 100 cubic yards of excess soil.

Soil samples will be analyzed in a Massachusetts-certified laboratory for the following waste characterization parameters (or a modified list, as required by the disposal facility).

- Total Petroleum Hydrocarbons (TPH) by a modified US EPA Method 8100;
- Semi-Volatile Organic Compounds (SVOCs) by USEPA Method 8270;
- Volatile Organic Compounds (VOCs) by US EPA method 8260;

- Polychlorinated biphenyls (PCBs) by US EPA method 8080;
- RCRA 8 Metals (arsenic, barium, cadmium, chromium, mercury, lead, selenium, and silver);
- Flashpoint by US EPA method 1010M;
- Corrosivity (pH) by US EPA method 9045C;
- pH;
- Reactivity by US EPA methods SW-846 7.3.3.2/9014 and SW-846 7.3.4.2/376.2;
- Organic halides;
- Cyanide, as appropriate; and
- TCLP metals, as appropriate.

1.2.4 Soil Categories & Disposal Options

Disposal options for excess soil from this project have been broken down into three categories and are summarized in the following sections.

1.2.4.1 Category “A” Soils

Category “A” Soils contain OHM concentrations below MCP S1 criteria and below the OHM levels at the re-use facility. The following are two re-use options for these soils.

- Beneficial Reuse
Soil containing OHM concentrations below MCP S1 Criteria can be used as fill material at offsite locations providing that pre-existing OHM concentrations at the fill location are equal or higher than those that exist in the construction generated soil, and the re-use location has been approved by MassDOT.
- ABC Facility
Soil and rock containing OHM concentrations below MCP S1 Criteria can be processed for reuse at a permitted Asphalt Brick Concrete (ABC) Processing Facility.

1.2.4.2 Category “B” Soils

Category “B” Soils contain OHM concentrations above MCP S1 criteria, but are not federally regulated hazardous wastes. The following are three disposal options for these types of soils:

- Unlined Landfill
Soil containing OHM concentrations above S1 criteria cannot be beneficially used at unrestricted properties. These soils must meet the landfill acceptance criteria, and can then be used as cover material at a permitted, unlined landfill.

- Lined Landfill
Soil containing OHM concentrations that meet the landfill acceptance criteria (Comm-97-001) can be used as cover at a permitted, lined landfill, if unsuitable for an unlined landfill.
- Asphalt Batch / Recycling Facility
Soil containing OHM concentrations that meet acceptance criteria for a permitted asphalt batch facility can be recycled into asphalt or flowable fill material.

1.2.4.3 Category "C" Soils

Category "C" Soils contain OHM concentrations above MCP S1 Criteria, generally have OHM above landfill acceptance criteria, and exceed Toxicity Characteristics Leaching Procedure "TCLP" standards.

- Regulated Hazardous Waste
Soil containing OHM concentrations that are considered characteristic or listed hazardous wastes by MassDEP hazardous waste regulations or by the USEPA RCRA regulations must be managed as a regulated hazardous waste at a permitted hazardous waste disposal facility.

1.3 Groundwater Management

Dewatering of excavations will be required during the Project. It is anticipated that groundwater table elevations will be able to be maintained outside the excavation area by using excavation support and mining structures that are impermeable. If it can be established that there will be no detrimental effects on surrounding structures; the groundwater table in the vicinity of the Relocated Bowdoin Station may be temporarily lowered approximately 5 to 15 ft. If a lowered groundwater table is likely to affect surrounding structures; a grouting system could be designed that does not significantly lower groundwater levels in this area. Recharging of groundwater is also an option in some areas, if needed.

At the 10% design stage, there is limited information on the quantity and quality of groundwater that will be removed during this project. Concentrations of OHM are expected to be present in groundwater at various locations along the Project Corridor.

Dewatered groundwater from the Project must not be discharged to nearby storm drains and/or surface water bodies without proper pre-treatment and permitting from MassDEP, MWRA, and/or EPA. Any plans for site dewatering shall be subject to review and approval by the MassDOT. Any plans for offsite disposal of excess water shall be subject to review and approval by the MassDOT.

The contractor must manage dewatered groundwater in one of the below described ways.

1.3.1 Recharge to the Ground

Groundwater should be pumped from the excavation and recharged back to the ground in an area approved by MassDOT. For small, short-term excavations where only limited dewatering is anticipated; groundwater extracted during dewatering can be pumped from one side of the project area to another trench. This option will apply only when a very small of volume water is collected and where such return to groundwater will not result in flooding over the ground surface or within nearby subsurface utilities or other structures.

If a larger volume of groundwater is removed, excess groundwater can be pumped into drums or fractionation ("frac") tanks for temporary containment during construction activities. The drums or tank(s) will collect and store the water until subsurface work is complete. In some cases, it may be possible to return the collected water into the opened excavation once the subsurface work is complete.

If groundwater is dewatered from an MCP site, then the water can only be replaced into the ground within the MCP site boundaries (as long as there is no oil on the water).

Only water free of oil can be recharged back in the ground.

1.3.2 Remediation General Permit

Groundwater can be pumped from the ground into a container, treated to remove contamination, and then discharged to surface water under a USEPA National Pollutant Discharge Elimination System (NPDES) Remediation General Permit. This permit will be obtained by MassDOT and implemented by the Contractor.

1.3.3 MWRA Permit

Groundwater can be pumped from the ground into a container and treated to remove contamination, and then discharged to Boston sewers using a Metropolitan Water Resources Authority permit. This permit will be obtained by MassDOT, and implemented by the Contractor.

1.3.4 Off-Site Disposal

Groundwater can be pumped from the ground into a container or tank truck and then shipped to an off-site treatment and disposal facility, using a BOL or hazardous waste manifest.

All groundwater dewatered from the project and from MCP sites must be shipped off-site under a BOL or hazardous waste manifest.

1.4 Project Responsibilities

Responsibilities which must be completed during the course of the Project are outlined below.

1.4.1 Responsibilities of MassDOT (Or Designee)

will be responsible for pre-characterizing soil and groundwater along the Project Corridor. The sampling results will be provided to the construction contractors. MassDOT or their designee will also be responsible for the following:

- Review and approve (or reject) proposed disposal and recycling facilities for receipt of the waste soil, rock, and water from the project.
- MCP Notification to Property Owners prior to collection of soil or groundwater samples on their property, and notification to Owners of analytical results.
- Prepare appropriate MCP plans, reports, and shipping papers, as needed (such as RAM Plans, MCP Phase II Extension and Tier Permit Transfers, Bills of Lading, hazardous waste manifests).
- Notify MassDEP of MCP reporting obligations, if applicable.

1.4.2 Responsibilities of Construction Contractor

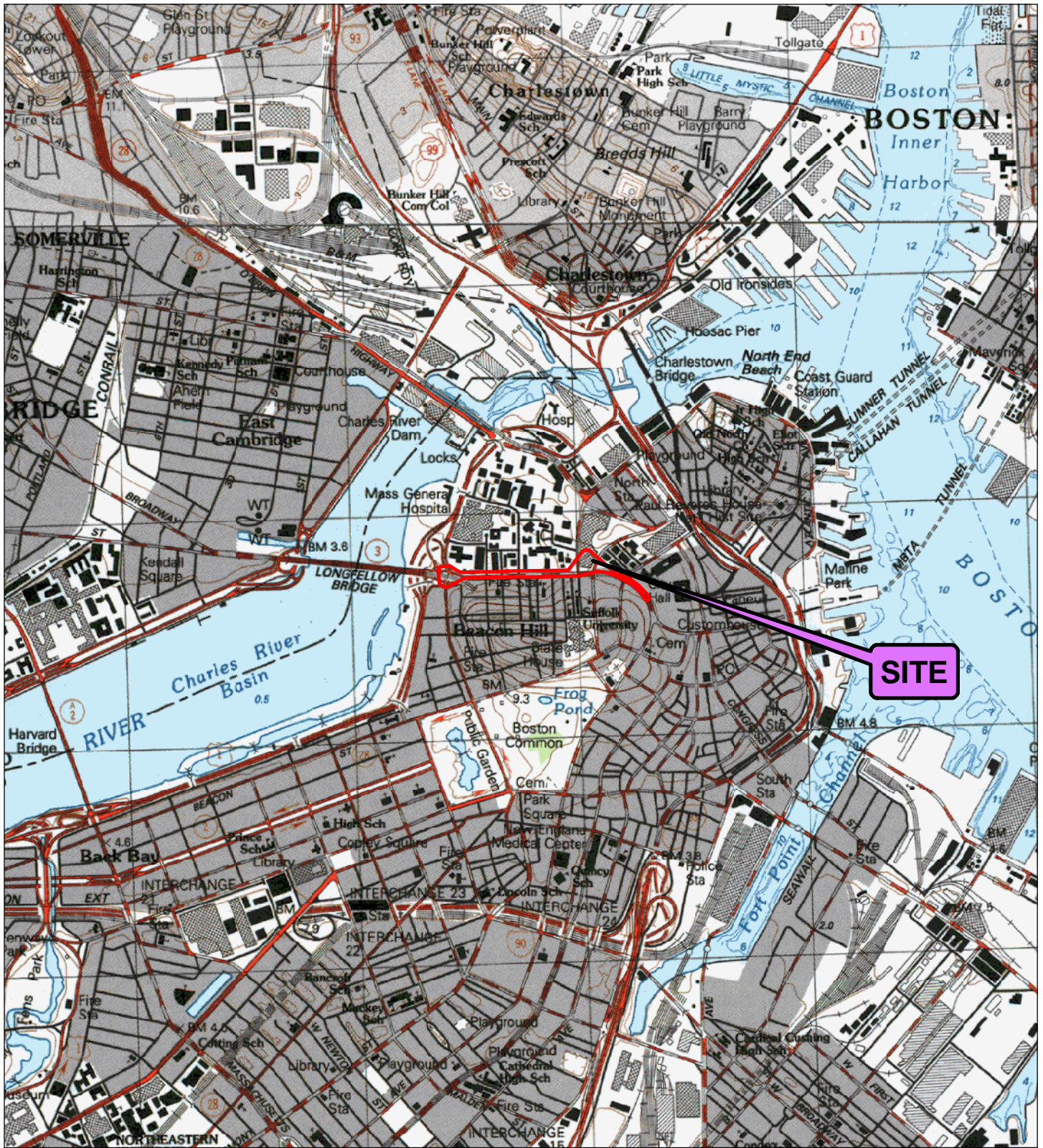
The construction contractor will be responsible for the proper soil excavation, storage, management, and transportation during this project. The following are included in the contractor responsibilities:

- Provide equipment to transport soil from the project site to either an off-site temporary storage facility (if used for this project) or to transport soil to off-site disposal and recycling facilities.
- Provide hazardous waste transportation of any hazardous wastes generated during excavation and construction activities.
- Ensure all excavation, storage, and transportation of subsurface materials from this project are managed in accordance with applicable MassDEP solid waste, hazardous waste, and MCP regulations, local, and federal regulations.

- The contractor shall submit a list of proposed soil disposal facilities to MassDOT for approval. MassDOT will approve or deny use of the facility and then provide a LSP BOL to the contractor for each approved soil disposal or recycling facility.
- The contractor must identify locations at which asphalt, concrete, and soil are being proposed for disposal, recycling or use as fill material, and temporary storage/staging area(s).
- The contractor must submit documentation related to the volumes and final disposition of all excavated materials including asphalt, concrete, soil and water have been transported for disposal, recycling, or use as fill material.
- If oily soils or contaminated materials are uncovered during the project, the contractor must decontaminate all tools and equipment that come in contact with the contaminated materials. Decontamination will consist of brushing loose soil from the equipment and washing the equipment with either a water wash or steam cleaning, depending on the level of contamination. Decontamination water will either be containerized or managed in accordance with MassDOT approved procedures.
- All trucks leaving the work site must have their wheels brushed or washed free of soil to ensure soil is not tracked off the project site. All loads of soil and debris must be covered prior to leaving the project site.

If new discoveries of spills or releases are encountered, and subsurface soil is suspected to contain OHM, the contractor shall notify the MassDOT and their LSP immediately for guidance. Additional environmental reporting, health and safety plans, or other actions might be required.

“Clean” soil can be replaced in the excavations, but contaminated soil must be removed from the site.

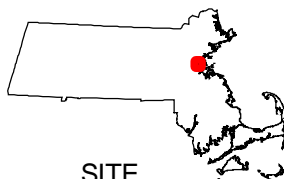


— Approximate Site Boundary



0 1,000 2,000 Feet

MASSACHUSETTS



SITE LOCATION



Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
978-970-5600

SITE LOCATION MAP

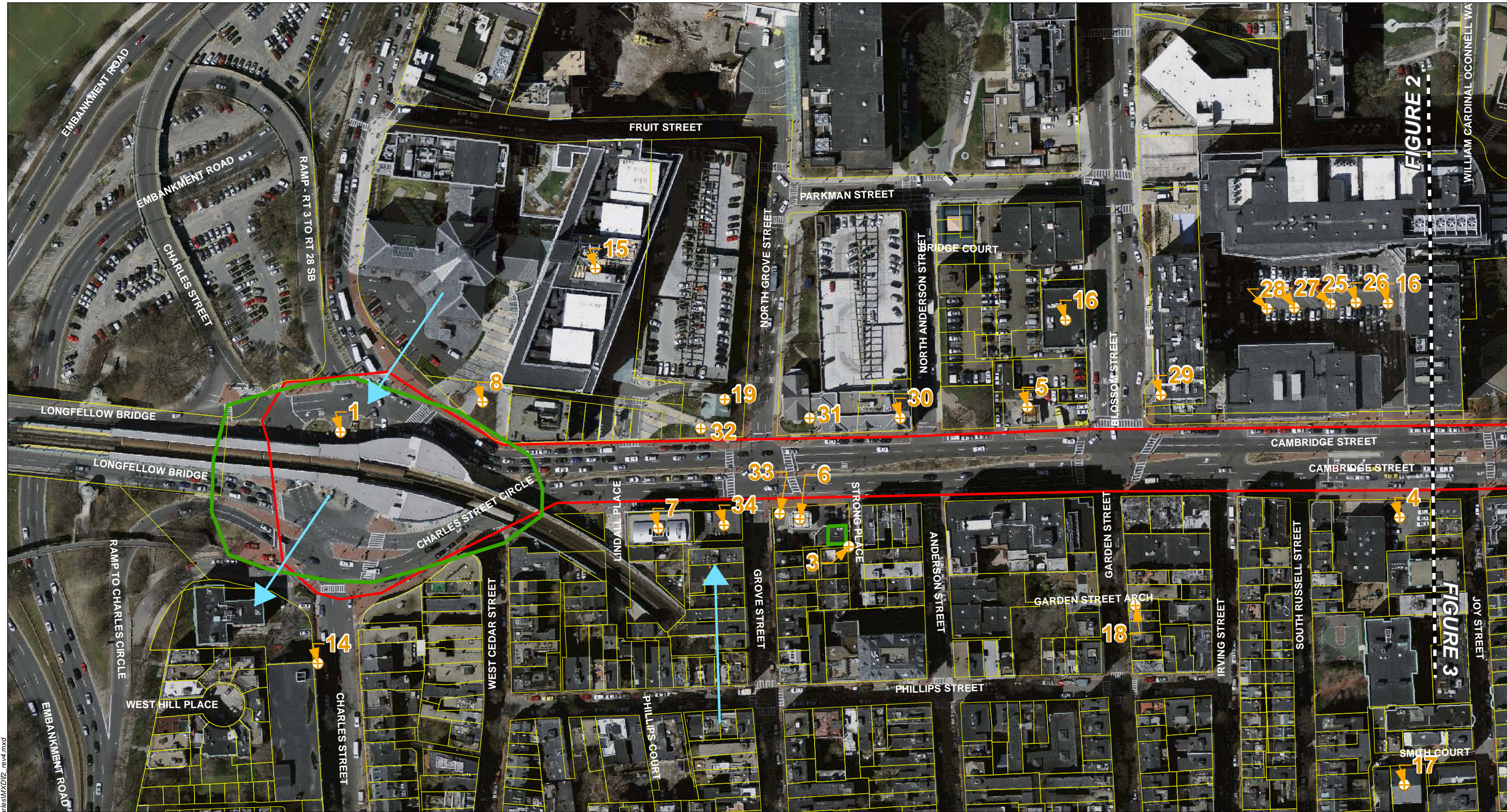
**RED LINE / BLUE LINE
CONNECTOR PROJECT
BOSTON, MASSACHUSETTS**

FIGURE 1

August 2009

Base map: USGS 7.5 Minute Topographic Quadrangles
Boston North (1985) Boston South (1987)

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- Approximate Limit of Work
- Presumed Ground Water Flow
- ⊕ Approximate Location of Past Releases
- Approximate Limits of Disposal Site Boundaries
- Parcels
- Match Line

0 100 200 Feet
Base map: 2008 Orthophoto, Parcels MASSGIS



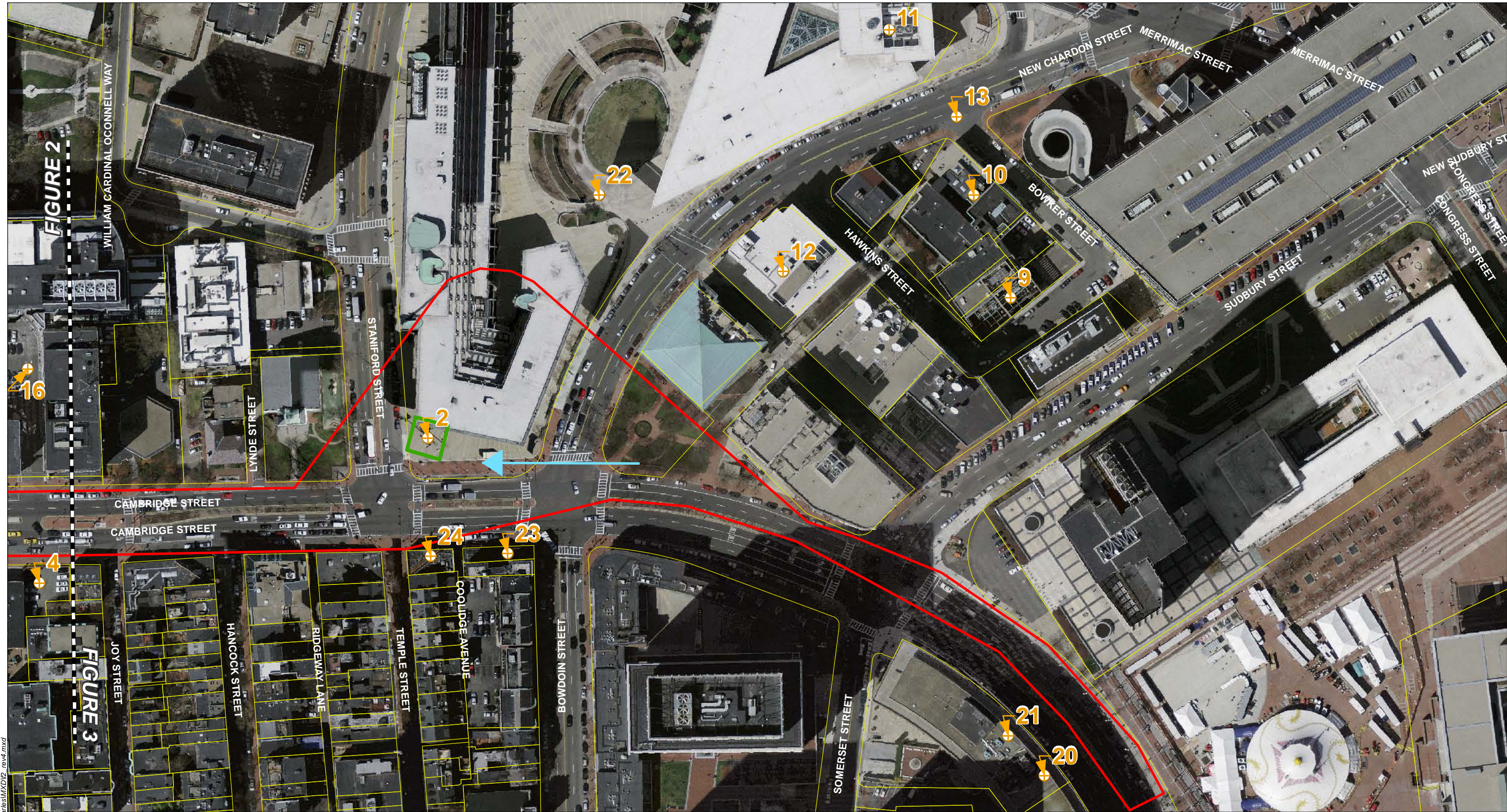
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
978-970-5600

SITE PLAN

**RED LINE / BLUE LINE
CONNECTOR PROJECT
BOSTON, MASSACHUSETTS**

FIGURE 2

SEPTEMBER 2009



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- Approximate Limit of Work
- ➡ Presumed Ground Water Flow
- ⊕⁷ Approximate Location of Past Releases
- Approximate Limits of Disposal Site Boundaries
- Parcels
- Match Line

0 100 200 Feet
Base map: 2008 Orthophoto, Parcels MASSGIS



Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
978-970-5600

SITE PLAN

**RED LINE / BLUE LINE
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BOSTON, MASSACHUSETTS**

FIGURE 3

SEPTEMBER 2009

Red Line / Blue Line Connector Project
Boston, Massachusetts

Surrounding Sites of Environmental Concern Summary Table						
Map ID	Site Name	Address	Proximity& Hydrogeologic Setting Relative to the Site	Regulatory Status & RTN/Spill ID No.	Release Details	Probability of Environmentally Impacting the Site
1	Charles CIR MGH Red Line Station	Charles Street	Site	A-2 RAO 3-21624	In April 2002, MassDEP was notified of a release of EPH and lead to soil which occurred at the site. A Class A-2 RAO Statement was subsequently submitted to MassDEP indicating that a permanent solution has been achieved in accordance with the MCP, but that contamination has not been reduced to background levels. Potential exists for Project construction workers to be exposed to soil associated with disposal site.	High
2	Hurley Building	19 Staniford Street	Site	B-1 RAO 3-15720	In November 1997, MassDEP was notified of a release of diesel fuel from a 550-gallon UST which occurred at the site. Following response actions which included the in-place closure of the UST system, a Class B-1 RAO Statement was submitted to MassDEP. The report indicates that the release appears to have been confined to subsurface soil and groundwater in the immediate vicinity of the closed UST. Potential exists for Project construction workers to be exposed to soil associated with disposal site.	High
3	Residence	1,2,4 Strong Place	85 feet south/upgradient	1. Status or Interim Report Received (Open) 3-12300	1. In March 1995, MassDEP was notified of evidence of a release of No. 2 fuel oil to groundwater from an unidentified source, which resulted in approximately two inches of light non-aqueous phase liquid (NAPL) on the groundwater table. Disposal site representatives filed for a Downgradient Property Status (DPS) under the MCP asserting that an upgradient property was responsible for the oil contamination at the property. Oral approval was received from MassDEP to complete an Immediate Response Action (IRA), and a status or interim report was submitted to MassDEP in October 1996. The limits of the disposal site are defined and do encroach upon the Project limits of work.	High
				2. A-2 RAO 3-17489	2. In November 1998, MassDEP was notified of a release of No. 2 fuel oil which occurred at the site. A Class A-2 RAO Statement was subsequently submitted to MassDEP.	Moderate
4	Engine 4	200 Cambridge Street	35 feet south/upgradient	A-2 RAO 3-18850	In October 1999, MassDEP was notified of a release of EPH to soil which occurred at the site. Following Phase III investigations as defined in the MCP, a Class A-2 RAO Statement was submitted to MassDEP.	Moderate
5	Gulf / Former Exxon Service Station	239 Cambridge Street	Adjacent to the north/downgradient	1. RAO 3-4326	1. In July 1993, MassDEP was notified of a release of an unknown quantity of an unknown chemical which occurred at the site. An RAO Statement of unreported class was subsequently submitted to MassDEP, indicating disposal site closure. MassDEP files did not identify specific details regarding disposal site boundaries associated with this release; however, based on review of site plans depicting soil boring and monitoring well locations, TRC does not anticipate the limits of this disposal site to encroach upon the Project limits of work.	Moderate
				2. A-2 RAO 3-14911	2. In March 1997, MassDEP was notified of a release of TPH and lead to soil which occurred at the site. A Class A-2 RAO Statement was subsequently submitted to MassDEP. MassDEP files did not identify specific details regarding disposal site boundaries associated with this release; however, based on review of site plans depicting soil boring and monitoring well locations, TRC does not anticipate the limits of this disposal site to encroach upon the Project limits of work.	Moderate
6	Sunoco Station / Grampy’s Gas	296 Cambridge Street	Adjacent to the south/upgradient	1. Closed N91-1340	1. In September 1991, MassDEP was notified of a release of gasoline from a UST which occurred at the site. Regulatory closure was subsequently achieved.	Moderate
				2. A-2 RAO 3-11926	2. In December 1994, MassDEP was notified of a release of gasoline to soil from a UST which occurred at the site. A Class A-2 RAO Statement was subsequently submitted to MassDEP. MassDEP files did not identify specific details regarding disposal site boundaries associated with this release; however, based on review of site plans depicting locations of remedial excavations, soil sample collection points, and monitoring wells, TRC does not anticipate the limits of this disposal site to encroach upon the Project limits of work.	Moderate
7	Former Gasoline Station	326 Cambridge Street	Adjacent to the south/upgradient	A-2 RAO 3-1805	In January 1989, MassDEP was notified of a release of an unknown chemical (presumably gasoline) which occurred at the site from a UST. A Class A-2 RAO Statement was subsequently submitted to MassDEP.	Moderate
8	Corner of Charles Street	327 Cambridge Street	Adjacent to the north/downgradient	A-2 RAO 3-22677	In March 2003, MassDEP was notified of a release of oil to soil which occurred at the site. Following Phase II investigations as defined in the MCP, a Class A-2 RAO Statement was submitted to MassDEP.	Moderate
9	Manhole	29 Hawkins Street	380 feet northeast/downgradient	Closed N88-0434	In March 1988, MassDEP was notified of evidence of a release of No. 2 fuel oil from a nearby police station. Regulatory closure was subsequently achieved.	Low
10	City Property	43 Hawkins Street	480 feet northeast/downgradient	1. Closed N92-0371	1. In October 1988, MassDEP was notified of a release of No. 2 fuel oil from a UST which occurred at the site. Regulatory closure was subsequently achieved.	Low
				2. Tier 1D (Open) 3-2737	2. In October 1989, MassDEP was notified of a release of an unknown quantity of No. 2 fuel oil from a 5,000-gallon UST to a manhole. MassDEP files indicate that response actions pertaining to this release have not been performed. The site is currently classified as a Tier 1D disposal site, indicating that the responsible party (RP) has failed to provide a required submittal to MassDEP by a specified deadline.	Low

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11	Brooke Courthouse	24 New Chardon Street	575 feet northeast/downgradient	1. Tier II (Open) 3-11346	1. In August 1994, MassDEP was notified of a release of EPH compounds and metals which occurred at the site from an unknown source. The disposal site is tier classified and is currently undergoing remedial actions in accordance with the MCP and as outlined in the facility's Release Abatement Measure (RAM). The site is located presumably downgradient.	Low
				2. Closed 3-11923	2. In December 1994, MassDEP was notified of a release of approximately 1,000 gallons of No. 2 fuel oil from a UST which occurred at the site. Following response actions, an IRA Completion Statement was submitted to MassDEP.	Low
12	VFK Station Post Office	25 New Chardon Street	230 feet northeast/downgradient	Closed N88-0955	In June 1988, MassDEP was notified of a release of hazardous materials which occurred at the site. Regulatory closure was subsequently achieved.	Low
13	Bowker Street	New Chardon Street	550 feet northeast/downgradient	URAM Completion Statement Received (Open) 3-21775	In May 2002, MassDEP was notified of a release of gasoline which occurred at the site from an unknown source. A Utility-related Abatement Measure (URAM) was performed to remediate site contamination and a URAM Completion Statement has been submitted to MassDEP. Disposal site closure is anticipated following MassDEP's review of site data and approval of level of site cleanup.	Low
14	Mass Eye & Ear	160 Charles Street	100 feet south/upgradient	RAO 3-122	In January 1987, MassDEP was notified of a release of an unknown quantity of an unknown chemical which occurred at the site. An RAO Statement of unreported class was subsequently submitted to MassDEP, indicating disposal site closure.	Low
15	Mass General Hospital	215 Charles Street	235 feet north/downgradient	A-2 RAO 3-4531	In July 1993, MassDEP was notified of a release of an unknown chemical which occurred at the site. A Class A-2 RAO Statement was subsequently submitted to MassDEP.	Low
16	MA General Hospital	16 Blossom Street	150 feet north/downgradient	Closed N92-0371	In March 1992, MassDEP was notified of a release of oil to soil which occurred at the site. Regulatory closure was subsequently achieved.	Low
17	Boston African American National Historic Site	8 Smith Court	400 feet south/upgradient	B-1 RAO 3-19022	In November 1999, MassDEP was notified of a release of EPH to soil which occurred at the site. Groundwater was not impacted. Following the completion of RAM activities, a Class B-1 RAO Statement was submitted to MassDEP.	Low
18	Residence	20 Garden Street	155 feet south/upgradient	A-2 RAO 3-22005	In August 2002, MassDEP was notified of a release of approximately 90 gallons of No. 2 fuel oil which occurred at the site. Following the completion of IRA activities, a Class A-2 RAO Statement was submitted to MassDEP.	Low
19	Norwell / Residence	6 N Grove Street	50 feet north/downgradient	1. Closed N88-1691	1. In October 1988, MassDEP was notified of a release of approximately 10 gallons of gasoline to soil which occurred at the site. Regulatory closure was subsequently achieved.	Low
				2. Closed N92-1438	2. In November 1992, MassDEP was notified of a release of No. 2 fuel oil which occurred in a residential basement. Regulatory closure was subsequently achieved.	Low
20	Property	52 Cambridge Street	70 feet south/upgradient	Closed N90-0345	In March 1990, MassDEP was notified of a release of approximately 100 gallons of methyl ethyl ketone (MEK) which occurred at the site. Regulatory closure was subsequently achieved.	Low
21	Property	60 Cambridge Street	70 feet south/upgradient	Closed N86-1263	In December 1986, MassDEP was notified of a release of an unknown quantity of oil which occurred at the site. Regulatory closure was subsequently achieved.	Low
22	Property	115 Cambridge Street	150 feet north/downgradient	1. Closed N89-1784	1. In January 1989, MassDEP was notified of a release of waste oil to soil from a UST which occurred at the site. Regulatory closure was subsequently achieved.	Low
				2. Waiver Completion Statement Permanent 3-3407	2. In January 1991, MassDEP was notified of a release of oil from a UST which occurred at the site. A Waiver Completion Statement was subsequently submitted to MassDEP.	Low
23	Leo's Garage	125 Cambridge Street	Adjacent to the south/upgradient	Closed N91-0712	In May 1991, MassDEP was notified of a release of an unknown quantity of No. 2 fuel oil to soil which occurred at the site. Regulatory closure was subsequently achieved.	Low
24	Property	128 Cambridge Street	Adjacent to the south/upgradient	Closed N87-0241	In February 1987, MassDEP was notified of a release of petroleum from a UST which occurred at the site. Regulatory closure was subsequently achieved.	Moderate
25	Charles River Plaza	161-209 Cambridge Street	170 feet north/downgradient	A-2 RAO 3-22728	In March 2003, MassDEP was notified of a release of metals and PAHs to soil which occurred at the site. A Class A-2 RAO Statement was submitted to MassDEP.	Low
26	Conrail Beacon Park Yard	170 Cambridge Street	170 feet north/downgradient	A-1 RAO 3-11552	In August 1994, MassDEP was notified of a release of approximately 140 gallons of diesel fuel from a vehicle fuel tank which occurred at the site. Following immediate response activities, a Class A-1 RAO Statement was submitted to MassDEP.	Low
27	Property	183 Cambridge Street	170 feet north/downgradient	Closed N86-0669	In July 1986, MassDEP was notified of a release of approximately 10 gallons of oil which occurred at the site. Regulatory closure was subsequently achieved.	Low
28	Boston Mazda	201 Cambridge Street	170 feet north/downgradient	Closed N93-0077	In January 1993, MassDEP was notified of a release of an unknown quantity of waste hydraulic fluid which occurred at the site. Regulatory closure was subsequently achieved.	Low
29	Property	219 Cambridge Street	40 feet north/downgradient	1. Closed N89-0905	1. In June 1989, MassDEP was notified of a release of approximately 50 gallons of gasoline which occurred at the site. Regulatory closure was subsequently achieved.	Moderate
				2. Closed N90-0940	2. In June 1990, MassDEP was notified of a release of a release of gasoline to soil which occurred at the site. Regulatory closure was subsequently achieved.	Moderate
30	Former Gasoline Station	261 Cambridge	30 feet	Waiver Completion	In April 1989, MassDEP was notified of a release of petroleum which occurred at the site from a UST system. A Waiver Completion	Moderate

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		Street	north/downgradient	Statement Permanent 3-967	Statement was subsequently submitted to MassDEP.	
31	Property	293 Cambridge Street	30 feet north/downgradient	Closed N90-0697	In May 1990, MassDEP was notified of a release which occurred at the site that impacted approximately 100 cubic yards of soil with gasoline. Regulatory closure was subsequently achieved.	Moderate
32	AST Leak	297 Cambridge Street	30 feet north/downgradient	Closed N92-088	In January 1992, MassDEP was notified of a release of approximately 100 gallons of No. 2 fuel oil which occurred at the site. Regulatory closure was subsequently achieved.	Moderate
33	Property	298 Cambridge Street	Adjacent to the south/upgradient	Closed N87-1633	In November 1987, MassDEP was notified of a gasoline release from a UST which occurred at the site. Regulatory closure was subsequently achieved.	Moderate
34	Property	310 Cambridge Street	Adjacent to the south/upgradient	1. Closed N87-1454	1. In October 1987, a release of an unknown quantity of oil occurred at the site. Regulatory closure was subsequently achieved.	Moderate
				2. Closed N88-1072	2. In July 1988, MassDEP was notified of a release of an unknown quantity of paint which occurred at the site. Regulatory closure was subsequently achieved.	Moderate
				3. Closed N93-0847	3. In June 1993, MassDEP was notified of a release of approximately 100 gallons of sodium hypochlorite which occurred at the site. Regulatory closure was subsequently achieved.	Moderate
				4. Closed N92-1676	4. A release of an unknown material occurred at the site. Regulatory closure was subsequently achieved.	Moderate

Notes:
Class A-1 RAO Statements indicate that a permanent solution has been achieved in accordance with the MCP and contamination has been reduced to background levels.
Class A-2 RAO Statements indicate that a permanent solution has been achieved in accordance with the MCP, but that contamination has not been reduced to background levels.
Class B-1 RAO Statements indicate that remedial actions were not necessary because a condition of “No Significant Risk” exists.